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80-10279  
CR-163345

PRELIMINARY

HEAT CAPACITY MAPPING REPORT

"Data available under NASA sponsorship  
by the NASA Langley Research Center  
Survey  
Program, and is believed to be without liability  
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NAS 5 - 24232

STANFORD REMOTE SENSING LABORATORY

Dept. of Applied Earth Sciences  
Stanford, California 94305

(F80-10279) GEOLOGICAL AND GEOTHERMAL DATA  
USE INVESTIGATIONS FOR APPLICATION EXPLORER  
MISSION-A (HEAT CAPACITY MAPPING MISSION)  
Technical Report, 1 Oct. - 31 Dec. 1979  
(Stanford Univ.) 5 p HC A02/MF A01 CSCL 03B G3/43

N80-29822

Unclassified  
00279

October 1, 1979 to December 31, 1979

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Ronald J.P. Lyon

Principal Investigator

*Irwin Reinson*  
Irwin Reinson  
Chairman

*George A. Parks*  
George A. Parks  
Associate Dean Research

Sponsored Projects RECEIVED

JUN 4 1980

SIS 1902.6  
HCM 914  
TYPE #

A. Title of Investigation: Geological and Geothermal Data Use  
Investigations for Application Explorer  
Mission-A (Heat Capacity Mapping Mission)

B. Investigation No.: Contract NAS 5-24232

C. Principal Investigators: R.J.P. Lyon  
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D. Technical Monitor: J.C. Broderick  
Goddard Space Flight Center  
Greenbelt, Maryland 20771  
(301) 982-4826

E. Period: October 1, 1979 to December 31, 1979

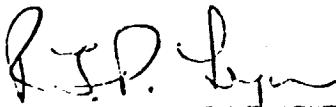
F. Action Required: None - Research Awaiting tapes

PRELIMINARY  
HEAT CAPACITY MAPPING REPORT  
NAS 5 - 24232

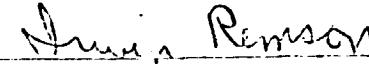
STANFORD REMOTE SENSING LABORATORY

Dept. of Applied Earth Sciences  
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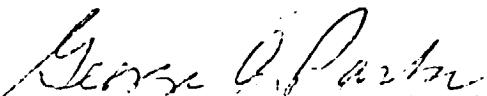
January 1, 1980 to March 31, 1980

  
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Principal Investigator

  
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Sponsored Projects

RECEIVED

JUN 4 1980

SIS/902.6  
HCM 014  
TYPE II

**A. Title of Investigation:** Geological and Geothermal Data Use Investigations for Application Explorer Mission-A (Heat Capacity Mapping Mission)

**B. Investigation No.:** Contract NAS 5-24232

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**D. Technical Monitor:**  
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Greenbelt, Maryland 20771  
(301) 982-4826

**E. Period:** January 1, 1980 to March 31, 1980

**F. Action Required:** Delta-T & T.I. tapes needed.

REPORT

The following HCMM 9-track, 1600 BPI calibrated tapes have been received to date (April, 1980):

Set 1: AA-0034-10210-3 30 May 1978  
0035-21310-1,2 (complete)  
0035-21340-replaced by 0035-21330-1,2

Set 2: AA-0082-10160-3 17 July 1978  
0082-21090-1,2 (complete)

Set 3: AA-0184-21040-1,2 20 October 1978  
(No night IR received, apparently no available)

Set 4: AA-0226-20480-1,2 7 December 1978  
(No night IR received, apparently too cold!)

No Delta-T, apparently thermal inertia, etc. sets have been received yet, except TEST TAPE set (E. USA) AAHDU-800823-1,2,3.

TRAVEL

Dr. A.E. Prelat attended the HCMM briefing at Ispna, Italy at NASA request, presenting a review of the Stanford HCMM project and an overview of the advantages of presenting merged data sets--Landsat plus HCMM dates. It was apparently well received.

PROGRES

1. Field data from the three site visits has been written up in final form.
2. The HCMM data from Set 2 (July 1978) has been studied relative to the field data using the Watson model. A reasonable fit has been secured.